IN THE CLAIMS:

1. (Original) Echographic examination method, in which an echographic contrast medium including microbubbles, or generating microbubbles upon exposure to ultrasonic waves, injected into a blood vessel, is sent by means of the blood circulation to a part of a living body under investigation and said part is struck by an ultrasonic excitation signal at an excitation frequency (f_0), and in which the microbubbles struck by the ultrasonic excitation signal generate an echo signal at a frequency different from the excitation frequency, said signal being used to generate an image, wherein said excitation signal exerts a pressure of 30 kPa to 1 MPa on said microbubbles, so that the microbubbles emit a stable signal at one subharmonic at least of the excitation frequency, said stable signal being processed to generate images.

2. (Original) Method according to Claim 1, wherein said excitation signal exerts a pressure in the range from 40 to 900 kPa, preferably from 60 to 500 kPa, and even more preferably from 60 to 200 kPa on said microbubbles.

3. (Original) Method according to Claim 1, wherein said excitation signal is a sinusoidal signal.

4. (Original) Method according to claim 1, wherein each of said microbubbles consists of a membrane containing a gaseous medium.

5. (Original) Method according to claim 2, wherein each of said microbubbles consists of a membrane containing a gaseous medium.

6. (Currently Amended) Method according to claim 3, wherein each of said microbubbles consists of a membrane containing a gaseous medium~~;~~.

7. (Currently Amended) Method according to ~~one or more of the preceding claims~~ claim 1, wherein a plurality of images obtained at successive instants of time of the echographic signal, or at spatially distinct points of said part under examination, are displayed simultaneously on a screen.

8. (Original) Echographic examination method, in which an echographic contrast medium containing microbubbles or generating microbubbles upon exposure to ultrasonic waves, injected into a blood vessel, is sent by means of the blood circulation to a part of a living body under investigation and said part is struck by 5 an ultrasonic excitation signal at an excitation frequency (f_0), and in which the microbubbles struck by the ultrasonic excitation signal generate an echo signal at a frequency different from the excitation frequency, said signal being used to generate an image, wherein said excitation signal exerts sufficient pressure on said microbubbles to cause their rupture, an echographic signal being generated during the rupture said signal containing a spectral distribution at the excitation frequency, at its subharmonics and at its ultraharmonics, said signal being filtered to extract the spectral content from it at at least

two of said ultraharmonics and subharmonics.

9. (Original) Method according to claim 8, wherein a plurality of images obtained at successive instants of time of the echographic signal, or at spatially distinct points of said part under examination, are displayed simultaneously on a screen.

10. (Original) Ultrasonic method for imaging, in which an echographic contrast medium including microbubbles, or generating microbubbles upon exposure to ultrasonic waves, is introduced into a portion of a body under investigation and is struck by an ultrasonic excitation signal at an excitation frequency (f_0), and in which the microbubbles struck by the ultrasonic excitation signal generate an echo signal at a frequency different from the excitation frequency, said signal being used to generate an image, wherein said excitation signal exerts a pressure of 30 kPa to 1 MPa on said microbubbles, so that the microbubbles emit a stable signal at at least one subharmonic of the excitation frequency, said stable signal being processed to generate images.

11. (Original) Method according to claim 10, wherein said body is a living body.

12. (Original) Method according to claim 11, wherein said contrast medium or agent is injected into a blood vessel of said living body.

13. (Currently Amended) Method according to Claim 10 ~~or 11 or 12~~, wherein said excitation signal exerts a pressure in the range from 40 to 900 kPa, preferably from 60 to 500 kPa, and even more preferably from 60 to 200 kPa on said microbubbles.

14. (Original) Method according to Claim 10, wherein said excitation signal is a sinusoidal signal.

15. (Original) Method according to Claim 11, wherein said excitation signal is a sinusoidal signal.

16. (Original) Method according to Claim 12, wherein said excitation signal is a sinusoidal signal.

17. (Currently Amended) Method according to Claim 13, wherein said excitation signal is a sinusoidal signal.

18. (Currently Amended) Method according to claim 10 ~~or 11 or 12~~, wherein each of said microbubbles consists of a membrane containing a gaseous medium.

19. (Original) Method according to claim 13, wherein each of said microbubbles consists of a membrane containing a gaseous medium.

20. (Currently Amended) Method according to claim 14, wherein each of said microbubbles consists of a membrane containing a gaseous medium;.

21. (Original) Method according to claim 10, wherein a plurality of images obtained at successive instants of time of the echographic signal, or at spatially distinct points of said part under examination, are displayed simultaneously on a screen.

22. (Original) Ultrasonic method for imaging, in which an echographic contrast medium including microbubbles, or generating microbubbles upon exposure to ultrasonic waves, is introduced into a portion of a body under investigation and is struck by an ultrasonic excitation signal at an excitation frequency (f_0), and in which the microbubbles struck by the ultrasonic excitation signal generate an echo signal at a frequency different from the excitation frequency, said signal being used to generate an image, wherein said excitation signal exerts sufficient pressure on said microbubbles to cause their rupture, an echographic signal being generated during the rupture said signal containing a spectral distribution at the excitation frequency, at its subharmonics and at its ultraharmonics, said signal being filtered to extract the spectral content from it at at least two of said ultraharmonics and subharmonics.

23. (Original) Ultrasonic imaging method, including the steps of:

- introducing a contrast medium including microbubbles, or generating microbubbles upon exposure to ultrasonic waves, in a portion under investigation of a body;

- strucking said portion with an ultrasound excitation signal at an excitation signal, said microbubbles generating an echo signal at a frequency different from the excitation frequency;

wherein said excitation signal is controlled to exert a pressure on said microbubbles such that the microbubbles emit a stable signal at at least one subharmonic of said excitation frequency.

24. (Original) Method according to claim 23, wherein said excitation signal is controlled to exert a pressure between 30kPa and 1 Mpa on said microbubbles.

25. (Original) Method according to claim 23, wherein said excitation signal exerts a pressure in the range from 40 to 900 kPa, preferably from 60 to 500 kPa, and even more preferably from 60 to 200 kPa on said microbubbles.

26. (Original) Ultrasonic imaging method, including the steps of:

- injecting a contrast medium including microbubbles, or generating microbubbles upon exposure to ultrasonic waves, in a blood vessel of a patient;

- strucking said microbubbles with an ultrasound excitation signal at an excitation signal, said microbubbles generating an echo signal at a frequency different from the excitation frequency; wherein said excitation signal is controlled to exert a pressure on said microbubbles such that the microbubbles emit a stable signal at at least one subharmonic of said excitation frequency.

27. (Original) Method according to claim 26, wherein said excitation signal is controlled to exert a pressure between 30kPa and 1 Mpa on said microbubbles.

28. (Original) Method according to claim 26, wherein said excitation signal exerts a pressure in the range from 40 to 900 kPa, preferably from 60 to 500 kPa, and even more preferably from 60 to 200 kPa on said microbubbles.

29. (Original) Ultrasonic imaging method, including the steps of:

- introducing a contrast medium including microbubbles, or generating microbubbles upon exposure to ultrasonic waves, in a portion under investigation of a body;

- strucking said portion with an ultrasound excitation signal at an excitation signal, said microbubbles generating an echo signal at a frequency different from the excitation frequency;

wherein said excitation signal exerts sufficient pressure on said microbubbles to cause their rupture, an echographic signal being generated during the rupture said signal containing a spectral distribution at the excitation frequency, at its subharmonics and at its ultraharmonics, said signal being filtered to extract the spectral content from it at at least two of said ultraharmonics and subharmonics.

30. (Original) Ultrasonic imaging method, including the steps of:

- injecting a contrast medium including microbubbles, or generating microbubbles upon exposure to ultrasonic waves, in a blood vessel of a patient;

- strucking said microbubbles with an ultrasound excitation signal at an excitation signal, said microbubbles generating an echo signal at a frequency different from the excitation frequency;

wherein said excitation signal exerts sufficient pressure on said microbubbles to cause their rupture, an echographic signal being generated during the rupture said signal containing a spectral distribution at the excitation frequency, at its subharmonics and at its ultraharmonics, said signal being filtered to extract the spectral content from it at at least two of said ultraharmonics and subharmonics.

31. (Original) An ultrasonic imaging system for imaging the harmonic response of a structure inside a body, including:

- means for transmitting ultrasonic energy into the body at an excitation frequency;

- means responsive to said transmitted ultrasonic energy, for receiving ultrasonic echo signals, generated by microbubbles of a contrast medium introduced into said body, at a subharmonic of said excitation frequency;

- means for producing an ultrasonic image from said echo signals;

wherein said excitation signal is controlled to exert a pressure on said microbubbles, so that the microbubbles emit a stable signal at one subharmonic at least of the excitation frequency, said stable signal being processed to generate images.

32. (Original) System according to claim 31, wherein said excitation signal is controlled

to exert on said microbubbles a pressure between 30 kPa and 1 MPa, and preferably between 40 to 900 kPa, and more preferably from 60 to 500 kPa, and even more preferably from 60 to 200 kPa.

33. (Original) An ultrasonic imaging system for imaging the harmonic response of a structure inside a body, including:

- means for transmitting ultrasonic energy into the body at an excitation frequency;

- means responsive to said transmitted ultrasonic energy, for receiving ultrasonic echo signals, generated by microbubbles of a contrast medium introduced into said body, at a subharmonic of said excitation frequency;

- means for producing an ultrasonic image from said echo signals;

wherein said excitation signal exerts sufficient pressure on said microbubbles to cause their rupture, an echographic signal being generated during the rupture said signal containing a spectral distribution at the excitation frequency, at its subharmonics and at its ultraharmonics, said means responsive to said transmitted ultrasonic energy including a filter to extract the spectral content from it at at least two of said ultraharmonics and subharmonics.